

Title (en)  
OPTICAL VALVE DEVICE

Title (de)  
OPTISCHE VENTILVORRICHTUNG

Title (fr)  
DISPOSITIF A VALVE OPTIQUE

Publication  
**EP 0497980 B1 19990721 (EN)**

Application  
**EP 91908187 A 19910426**

Priority  
• JP 11297790 A 19900427  
• JP 9100580 W 19910426

Abstract (en)  
[origin: EP0497980A1] An optical valve device in which an integrated circuit substrate comprising a semiconductor thin film and driving circuits and switching elements both formed on the semiconductor thin film and electro-optical materials are incorporated as one body. The integrated circuits for driving a display, driving electrodes, picture element electrodes and active elements including switching elements are formed on the substrate finely and densely. The semiconductor single crystal thin film having lattice defects of low density is formed on an electrically insulating support layer and the active elements are formed thereon by using microelectronics techniques. Light transmission of the electro-optical material layer is controlled by the active elements. The optical valve device is suitable to a high resolution video projector of a small size and a color displaying device of a matrix type. <IMAGE>

IPC 1-7  
**G02F 1/136**; H01L 21/84; H01L 21/304

IPC 8 full level  
**G02F 1/136** (2006.01); **G02F 1/1362** (2006.01); **G02F 1/1368** (2006.01); **G09F 9/30** (2006.01); **G09G 3/20** (2006.01); **G09G 3/36** (2006.01); **H01L 27/12** (2006.01); **H01L 29/78** (2006.01); **H01L 29/786** (2006.01)

CPC (source: EP US)  
**G02F 1/13454** (2013.01 - EP US); **G02F 1/1362** (2013.01 - EP US); **G02F 2202/105** (2013.01 - EP US)

Cited by  
EP0617313A3; US5534722A; US6798394B1; US7348971B2; US7864169B2; KR100321931B1

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